

CLAIMS

What is claimed is:

1 1. A method for synchronizing multimedia data having
2 at least audio and text sequences, comprising:
3 dividing the audio sequence into at least one audio data
4 group;
5 synchronizing a current audio data group of said at
6 least one audio data group to a nearest time mark; and
7 associating said current audio data group to a number of
8 a word in the text sequence corresponding to said current
9 audio data group.

1 2. The method of claim 1, wherein size of each of said
2 at least one audio data group is a multiple of audio frame
3 size.

1 3. The method of claim 1, wherein an interval of the
2 time mark is substantially similar in size as that of each of
3 said at least one audio data group.

1 4. The method of claim 3, wherein said associating
2 said current audio data group includes associating said group
3 to a number not used by any word in the text sequence when
4 word size is larger than the size of each of said at least
5 one audio data group or when the current audio data group has
6 a gap in the text sequence.

1 5. The method of claim 4, wherein said number includes
2 zero.

1 6. The method of claim 1, wherein the size of each of
2 said at least one audio data group is 100 milliseconds.

1 7. A method for synchronizing a text sequence with an
2 audio sequence, comprising:
3 arranging the audio sequence into a plurality of audio
4 data groups;
5 synchronizing a current audio data group of said at
6 least one audio data group to a nearest time mark;
7 associating said current audio data group to a number of
8 a word in the text sequence corresponding to said current
9 audio data group; and
10 packetizing said plurality of audio data groups along
11 with associated word numbers.

1 8. The method of claim 7, wherein said packetizing
2 includes sequentially packing said plurality of audio data
3 groups and said associated word numbers into at least one
4 packet.

1 9. The method of claim 8, wherein a first packet of
2 said at least one packet also includes the text sequence.

1 10. A computer readable medium containing executable
2 instructions which, when executed in a processing system,
3 causes the system to perform multimedia data synchronization,
4 comprising:
5 dividing the audio sequence into at least one audio data
6 group;
7 synchronizing a current audio data group of said at
8 least one audio data group to a nearest time mark; and
9 associating said current audio data group to a number of
10 a word in the text sequence corresponding to said current
11 audio data group.

1 11. The computer readable medium of claim 10, further
2 comprising:
3 packetizing said plurality of audio data groups along
4 with associated word numbers.

1 12. A multimedia data synchronization system,
 2 comprising:
 3 means for dividing audio data into at least one audio
 4 data group;
 5 means for synchronizing a current audio data group of
 6 said at least one audio data group to a nearest time mark;
 7 and
 8 means for associating said current audio data group to a
 9 number of a word in text data corresponding to said current
 10 audio data group.

1 13. The system of claim 12, further comprising:
 2 means for packetizing said plurality of audio data
 3 groups along with associated word numbers.

1 14. A multimedia system, comprising:
 2 a processor to divide audio data into at least one audio
 3 data group, said processor configured to synchronize a
 4 current audio data group of said at least one audio data
 5 group to a nearest time mark; and
 6 a correlator to associate said current audio data group
 7 to a number of a word in text data corresponding to said
 8 current audio data group.

1 15. The system of claim 14, further comprising:
2 an encoder to pack said plurality of audio data groups
3 along with associated word numbers into a plurality of data
4 packets.

1 16. The system of claim 15, wherein a first packet of
2 said plurality of data packets includes the text data.

1 17. The system of claim 15, further comprising:
2 a transmitter to transmit said plurality of data packets
3 to a destination node; and
4 a receiver to receive said plurality of data packets
5 from a source node.

1 18. The system of claim 17, further comprising:
2 a decoder to unpack said plurality of audio data groups
3 along with associated word numbers, said decoder providing
4 said plurality of audio data groups to a processor in the
5 destination node, such that said decoder arranges each of
6 said plurality of audio data groups to be synchronized to a
7 word in the text data.